



(12) **United States Patent**
Hayashi et al.

(54) **ULTRAVIOLET SENSOR AND METHOD FOR MANUFACTURING THE SAME**

(75) Inventors: **Kazushi Hayashi**, Kobe (JP); **Takeshi Tachibana**, Kobe (JP); **Yoshihiro Yokota**, Kobe (JP); **Nobuyuki Kawakami**, Kobe (JP)

FOREIGN PATENT DOCUMENTS

JP	5-335613	6/1992
JP	11-248531	3/1998

(73) Assignee: **Kabushiki Kaisha Kobe Seiko Sho,**
Hyogo (JP)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

* cited by examiner

Primary Examiner—Long Tran

(74) *Attorney, Agent, or Firm*—Reed Smith LLP; Stanley P. Fisher, Esq.; Juan Carlos A. Marquez, Esq.

(21) Appl. No.: 11/057,603

(22) Filed: **Feb. 15, 2005**

(57) **ABSTRACT**

(65) **Prior Publication Data**

US 2005/0181122 A1 Aug. 18, 2005

(30) **Foreign Application Priority Data**

Feb. 16, 2004 (JP) 2004-039083

(51) **Int. Cl.**
H01L 29/15 (2006.01)
H01L 31/00 (2006.01)

(52) **U.S. Cl.** 257/77; 257/226; 257/440

(58) **Field of Classification Search** 257/77,
257/226, 440, 323.14, E31.954, E23.111,
257/417; 313/531, 530

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,080,378 A * 6/2000 Yokota et al. 423/446

3 Claims, 4 Drawing Sheets

